

### 3.2 - Solving Equations Using Multiplication and Division

Ex 1:  $-21m = 42$

$$\textcircled{-2} \times 21 = 42$$

$$\frac{-21m}{-21} = \frac{42}{-21}$$

$$m = -2$$

Ex 2:

$$\frac{y}{7} = 12$$

$$\textcircled{7} \cdot \frac{y}{7} = 12 \textcircled{7}$$

$$y = 84$$

$$y =$$

Ex 3:  $\frac{3}{4}t = |-5\frac{1}{2}|$

$$\left(\frac{4}{3}\right)\frac{3}{4}t = \frac{55}{1}\left(\frac{4}{3}\right) = \frac{22}{3} = 7\frac{1}{3}$$

~~$\left(\frac{4}{3}\right)\frac{3}{4}t = \frac{11}{2}$~~   $\left(\frac{4}{3}\right)$

$t = \frac{44 \div 2}{6 \div 2} = \frac{22}{3}$

Ex 4: Each household in the United States receives about 676 pieces of junk mail per year. About how many pieces does a household receive per week?

$$\frac{676}{52} = 13 \text{ pieces/week}$$

$$\frac{676 \text{ pieces}}{\cancel{1 \text{ yr}}} \times \frac{\cancel{1 \text{ yr}}}{52 \text{ weeks}} = \uparrow$$

Homework: p.142 #24-54 even